

An Assessment of the Potential to Expand Agricultural Production, Processing and Distribution in Washtenaw and Surrounding Counties

Prepared by

William Knudson and Brenda Reau
Product Center Food Ag Bio
Michigan State University

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**Act 88: Growing the Local
Economy of Washtenaw County**

Executive Summary

This paper assesses the potential for expanded farm and food production and processing in Washtenaw County and the surrounding area. This region accounts for approximately 40 percent of the state's population and the population of Washtenaw County is in excess of 350,000. The population in the region is large enough to support a food system that focuses on local food for a subset of consumers.

In some respects Washtenaw County and the surrounding area does or could produce a fair amount of food for local consumption. This is particularly true for milk, apples, sweet corn and some other products. However, it does not appear that the local nature of these products has been emphasized.

In order to further expand the local food system some changes may need to be made. Most of the farm output in Washtenaw County and the surrounding counties is corn and soybean production. These crops are used primarily for livestock feed and there is limited use for human consumption. Fruit and vegetable production is generally limited, as is livestock production with the exception of dairy farms. While relatively small in number, compared to other counties, Washtenaw County is a large producer of sheep.

Meat processing was analyzed in some detail. Unfortunately, establishing a local meat system will be difficult. The area is not a major producer of livestock and there are few USDA licensed meat processing facilities. The lack of processing capacity coupled with the small livestock numbers limits the potential for growth.

This region has several large institutions that could serve as markets for locally produced food. There are several large prisons and hospitals in the area. Washtenaw County is home to two major universities: Eastern Michigan University and the University of Michigan. The dormitory system at the University of Michigan has been quite active in sourcing locally produced food and the Michigan Farm to Institution Network has been activity involved in the county. This creates a base to build from in terms of increasing the consumption of locally produced food. There are also several CSAs in the area that directly link farmers to consumers.

There are opportunities to produce and process food products locally. Artisanal foods, especially breads have a great deal of potential. The area is well suited to wheat production and bakeries are the biggest food processing activity in Washtenaw County. Dairy production and the interest in artisanal food also present an opportunity for specialty cheese manufacturers. The craft beer industry continues to grow, and Washtenaw County could probably support several microbreweries and brewpubs.

One thing actors in the food system have in common is the fact that they are busy. This means that some markets need assistance in getting buyers and sellers together. A broker or aggregator could assist in this very important activity. Cooperatives could also be used to generate and market sufficient quantities of output to meet the needs of buyers.

I. Introduction

This study assesses the potential for expanded farm and food production and processing for local consumption in Washtenaw County and the surrounding area. In addition to Washtenaw County, Jackson, Lenawee, Livingston, Monroe, Oakland, and Wayne County are also considered. This region accounts for approximately 40 percent of the state's population. There are also some major institutions, especially prisons and universities in the area which would generate additional demand for locally produced food. The study pays particular emphasis on the potential for local meat, fruit and vegetable production and processing. Recommendations for expanded locally produced food are also included.

The population in the region is large enough to support a food system that focuses on local food for a subset of consumers. However, this will require a fundamental change in agricultural production and processing in the region. Most of the farm production is concentrated in corn, soybeans and wheat production. Fruit and vegetable production is limited, as is livestock production with the exception of dairy farms. These facts make it difficult to generate enough output to support a local food system.

However there are opportunities to locally produce and process food products. Artisanal foods, especially breads and to a lesser extent to cheeses possess opportunities. While vegetable production is limited there is potential to expand output; however expanding fruit production with the possible exception of apples, will be extremely difficult.

Food processing, wholesaling and packaging is limited with the exception of Wayne County. Products that need to be processed near major population centers tend to be the primary processing activities. This is particularly the case for bakery products which reinforces the potential for breads and related products. Bakeries are the biggest food processing activity in Washtenaw County. Creating a local meat food system will be extremely difficult.

In order to be successful new market actors may need to be considered. These actors would aid in getting buyers and sellers together, they will play a particularly important role in aggregating enough output to meet the demands of buyers, especially institutional buyers.

II. Population and Consumption Characteristics

Overview

With a total population of almost 4 million, about 40 percent of the people in Michigan live in Washtenaw and the surrounding counties. This creates the opportunity to develop an integrated food system with an emphasis on locally produced food. The estimated population in 2013 in the region is shown in Table 1.

Table 1: Population of Washtenaw and Surrounding Counties

County	Population
Jackson	160,369
Lenawee	99,188
Livingston	184,443
Monroe	150,376
Oakland	1,231,640
Washtenaw	354,240
Wayne	1,775,273
Total	3,955,529

Source: U.S. Census Bureau

The two leading counties, Wayne and Oakland, each have a population of well over 1 million. While the biggest city in Wayne County is Detroit many people in the faster growing western part of Wayne County often travel to Washtenaw County.

Washtenaw County is the third largest county with a population in excess of 350,000. While having a relatively low population, Livingston County is one of the fastest growing counties in the state. The two biggest agricultural counties, Lenawee and Monroe, also have the smallest populations.

Food consumption in the region is based on U.S. consumption patterns for the U.S. as a whole. The amount of selected food products that are consumed in the region and in Washtenaw County are shown in Table 2. Poultry are not included due to the few chickens and turkeys produced in the area.

Table 2: Estimated Consumption of Selected Food Products (pounds)

	Beef	Pork	Cheese	Milk	Yogurt	Ice Cream	Fruit	Vegetables	Wheat Four
Washtenaw County	20,085,408	15,692,832	11,760,768	63,090,144	4,782,240	4,711,392	91,500,192	139,251,744	47,716,128
Region	224,278,494	175,229,935	131,323,563	704,479,715	53,399,641	52,608,536	1,021,713,141	1,554,918,450	532,809,756

Since these figures are based on the U.S. average per capita consumption as estimated by the Economic Research Service of the U.S. Department of Agriculture the actual figures in Washtenaw County and the seven county area may be slightly different. The estimates were derived by multiplying average per capita consumption multiplied by the population in Washtenaw County and the region respectively. Clearly, there is potential to increase the level of local food production to meet this demand. The milk consumption figure for Washtenaw County is likely overstated because Washtenaw County has relatively few children and milk consumption is positively related to the number of children.

Institutional Demand

There are several major institutions the region that might be interested in locally produced food. Table 3 shows the number of hospitals, colleges and universities and correctional facilities in each county. This information was gathered using the MSU Biomass Inventory which identifies the source of biomass by source and location.

Table 3: Selected Institutions in Washtenaw and Surrounding Counties

County	Hospitals	Colleges and Universities	Correctional Facilities	Total
Jackson	2	2	6	10
Lenawee	2	2	2	6
Livingston	1	1	0	2
Monroe	1	1	0	2
Oakland	17	23	0	40
Washtenaw	5	5	1	11
Wayne	18	19	4	41
Total	46	53	13	112

Overall there are 112 institutions in the region 46 hospitals, 53 colleges and universities and 13 correctional facilities. Washtenaw County has 5 colleges and universities, 5 hospitals and 1 correctional facility.

The facilities vary quite widely by size and scope. Jackson has the largest prison complex in the area. However, given current prison contracts, access to the prison population may be limited until the current food service arrangement is changed. Washtenaw County has two major universities. Eastern Michigan University has a student enrollment of approximately 23,000 and a faculty and staff of close to 2,500. The dormitory system can handle 3,668 students.

The biggest residential university in the area is the University of Michigan. According to the university website, in the fall of 2013 the University had 43,710 students and 25,260 faculty and staff for a total population of 68,970. Approximately 10,000 students live on campus. The University of Michigan hospitals are also among the largest if not the largest hospitals in the region. If it is possible to make it easier to access local food for food operations staff at the University of Michigan there is a built in market at the University.

The University of Michigan University Housing division is engaged in sourcing locally produced food. According to their website, more than 30 farmers and suppliers provide the university with fruits, vegetables and honey as well as other products and are looking for ways to expand their purchases of locally produced foods. All the milk consumed on campus comes from dairy farms located within 100 miles although the bottling plant is located in Calhoun County. The university provides an opportunity to expand local food production. A dedicated aggregator or broker could make the process easier for the university.

One potential partner is the Michigan Farm to Institution Network (MFIN) is a statewide learning and practice collaborative that supports Michigan institutions’ efforts to increase local food purchases toward the 20 percent by 2020 goal set forth in the Michigan Good Food Charter. In Washtenaw County, this effort is coordinated by the Ecology Center located in Ann Arbor and the Michigan State University Center for Regional Food Systems. The MFIN is available to assist institutions in procuring food from local sources. Currently, St. Joseph Mercy Health System is a participant in this program. This

Health System includes Chelsea Community Hospital. The coordinator of the program has reported that some other Washtenaw County Institutions have expressed interest in the program.

III. On Farm Production

Number of Farms and Acreage

Washtenaw and the surrounding counties are not major producers of agricultural commodities. The total number of farms and acres in the area covered is shown in Table 4.

Table 4: Number of Farms and Acres in Washtenaw and Surrounding Counties

County	Number of Farms	Acres	Value of Output (\$1,000s)
Jackson	1,073	183,111	78,185
Lenawee	1,618	344,347	204,571
Livingston	734	86,141	52,251
Monroe	1,144	214,506	173,897
Oakland	537	31,722	25,907
Washtenaw	1,236	170,154	87,761
Wayne	287	15,767	26,535
Total	6,629	1,045,748	649,107

Source: 2012 Census of Agriculture

In 2012, Michigan had 52,194 farms that generated \$8.68 billion in value. The area covered by this study accounts for 12.7 percent of farms and 7.5 percent of the state’s farm sales. There are 9.9 million acres of farmland in the state, farms in this region account for about 10.5 percent of all the farmland in the state.

Lenawee County is the dominant county in the area accounting for slightly more than 30 percent of the sales in the area. Monroe County is second, accounting for about 27 percent of sales. Oakland and Wayne counties have very small farm sectors. Washtenaw County has more than 1,200 farms with more than \$87 million in sales which accounts for about 13.5 percent of sales in the region.

Field Crop Production

The primary agricultural commodities produced in the area are field crops, particularly corn, soybeans and wheat. Forage production is important for beef and dairy production. Lenawee County is particularly large producer of field crops. Output for the major field crops is shown in Table 5.

Table 5: Selected Crops, Washtenaw and Surrounding Counties

County	Corn (bushels)	Forage (tons)	Soybeans (bushels)	Wheat (bushels)
Jackson	4,266,920	38,129	1,346,470	451,014
Lenawee	9,320,607	39,199	3,831,454	2,235,917
Livingston	2,163,494	23,714	698,020	403,300
Monroe	7,831,986	8,467	2,936,735	1,284,664
Oakland	473,807	12,515	106,614	69,595
Washtenaw	3,485,635	37,751	1,195,972	892,972
Wayne	253,731	1,224	125,455	11,261
Total	27,796,180	160,999	10,240,720	15,589,443

Source: 2012 Census of Agriculture

In 2012, the region accounted for 8.9 percent of corn production, 6.5 percent of forage production, 12.3 percent soybean production and approximately 39.0 percent of wheat production. Lenawee County consistently ranks in the top 10 counties in corn, wheat and soybean production. Monroe is also a major producer of corn, soybeans and wheat. Washtenaw and Jackson counties are fairly large producers of these crops. Livingston, Oakland and Wayne counties are minor producers of these commodities.

These crops are the major crops produced in the area and in Michigan. However, at least in the case of corn, soybeans and forage crops, these crops are not well suited to local food systems. They have to be fed to livestock or processed into manufactured food products. Soybeans in particular have relatively few food uses besides livestock feed, cooking oil and some manufacturing applications.

Conversely, wheat does present some opportunities. Unlike the other crops wheat is used for human food. There is considerable wheat processing in the form of bakeries and other wheat based products in the area. In order to take advantage of this opportunity farmers may need to change the varieties of wheat they produce to more closely match the needs of processors. This opportunity will be discussed in more detail when discussing food processing in the region.

Livestock

This region is not a major producer of livestock; it does produce a fair amount of milk relative to consumption. The number of farms, dairy cows and value of milk produced is shown in Table 6. NA in this and some of the following tables refers to Not Available; the USDA suppresses some information to keep the activities of individual farms becoming publicly available.

Table 6: Dairy, Washtenaw and Surrounding Counties

County	Farms	Number of Cows	Sales (\$1,000s)
Jackson	30	3,132	12,221
Lenawee	26	9,774	37,731
Livingston	13	1,888	9,513
Monroe	6	602	2,295
Oakland	6	NA	NA
Washtenaw	29	2,209	7,979
Wayne	1	NA	NA
Total	111	17,605	69,739

Source: 2012 Census of Agriculture

There are about 3,000 dairy farms in Michigan and approximately 376,000 dairy cows. Total sales in 2012 were about \$1.5 billion but have been increasing. The region accounts for 3.7 percent of dairy farms, about 4.7 percent of cows and about 4.5 percent of sales. While Jackson and Washtenaw County have the most dairy farms more than half the cows are in Lenawee County.

Due to the small level of milk production in the region there are limited opportunities to expand the local milk and dairy system especially at the processor level. It should be noted that it appears that a fair share of the demand for fluid milk can and is being met locally. The situation for processed dairy products is not optimistic. This is particularly true given the relatively large population base in the area. In areas with large populations local milk production tends to be used for fluid uses leaving less available for cheese, ice cream and other processed products. However, there may some limited potential in developing artisanal cheese, especially for the Washtenaw, Oakland and Western Wayne County.

Table 7 shows the situation for hogs in the region.

Table 7: Hogs, Washtenaw and Surrounding Counties

County	Farms	Number of Hogs Sold	Sales (\$1,000s)
Jackson	38	2,181	NA
Lenawee	35	NA	NA
Livingston	27	1,972	307
Monroe	38	989	96
Oakland	24	567	49
Washtenaw	48	9,160	1,257
Wayne	14	96	15
Total	224	14,965	1,724

Source: 2012 Census of Agriculture

In 2012, hog farms in the area accounted for about 10.4 percent of the total farms and less than one percent of the total number of hogs sold and total sales. It appears that hog production is primarily a part-time activity for most farmers. The largest county is Washtenaw although there may be some large producers in Lenawee County. It appears that most of the farms, with the possible exception of some in

Lenawee County, that produce hogs appear to be doing it on a part-time or a hobby basis. Michigan does not have a commercial sized hog processing facility which constrains growth in the entire hog sector.

There is interest in having a hog processing facility in Ohio or Michigan. Southeast Michigan, particularly Washtenaw County is a prime location for a processing facility. Most of the interest is in a commercial scale operation that would process hundreds if not thousands of carcasses a day.

Table 8 shows the level of production of beef cattle in the region.

Table 8: Beef, Washtenaw and Surrounding Counties

County	Farms	Number of Cattle	
		Marketed	Sales (\$1,000s)
Jackson	212	7,477	8,342
Lenawee	204	19,484	16,718
Livingston	112	2,579	2,029
Monroe	76	4,323	4,119
Oakland	39	390	388
Washtenaw	161	6,956	7,903
Wayne	16	80	61
Total	820	41,289	39,560

Source: 2012 Census of Agriculture

In 2012, the area accounted for 7.6 percent of the total number of farms (which includes some dairy farms), 6.1 percent of the cattle sold and 6.6 percent of sales. The largest counties in terms of sales and number of animals sold are Lenawee followed by Washtenaw. Washtenaw County accounted for 1.5 percent of farms, 1.0 percent of cattle sold and 1.3 percent of sales. These figures may overstate the potential for beef production in the region. In Michigan many beef cattle are sold as calves and yearlings and fed to market weight elsewhere. Dairy cows that are no longer productive are another source of beef cattle in the state and while well suited to hamburger and processed meat, their value as beef cattle is somewhat limited.

Goats and sheep are specialty animals that may have some potential for growth and development. This is particularly true for ethnic markets such as Arab and Hispanic consumers. Data on goats and sheep from the 2012 Census of Agriculture is shown in Table 9.

Table 9: Goats and Sheep, Washtenaw and Surrounding Counties

County	Goats			Sheep		
	Farms	Number of Goats	Sales (\$1,000s)	Farms	Number of Sheep	Sales (\$1,000s)
Jackson	95	1,114	51	80	9,595	1,800
Lenawee	64	431	31	42	831	130
Livingston	83	643	31	63	888	97
Monroe	46	329	8	39	507	93
Oakland	29	203	4	45	447	84
Washtenaw	84	791	50	109	6,621	1,387
Wayne	20	169	2	19	183	25
Total	421	3,680	177	397	19,072	3,616

Source: 2012 Census of Agriculture

In the case of goats, the region accounts for 16.1 percent of farms, 12.2 percent of goats sold and 11.0 percent of sales. In the case of sheep, the region accounts for 17.2 percent of farms, 30.2 percent of sheep sold and 35.0 percent of sales. The two biggest counties for both goat and sheep sales are Jackson and Washtenaw counties. Given the growth in the Arab population in the region and the interest in ethnic foods, goat production and processing has a strong potential for growth. The United Producers livestock market in Manchester is one of the few livestock auctions that handle goats and sheep.

Bees are important for two reasons. The first is honey is a product that is often sold locally; most farmers markets have at least one local honey producer. The second reason is that bees are necessary for pollination of fruit crops. Without sufficient numbers of bees it will be difficult to produce fruit for the local market. The data on bees is presented in Table 10.

Table 10: Bees, Washtenaw and Surrounding Counties

County	Farms	Number of Colonies	Pounds of Honey	Honey Sales (\$1,000s)
Jackson	22	1,041	61,709	145
Lenawee	30	1,057	63,222	55
Livingston	19	4,784	204,984	NA
Monroe	21	78	4,308	8
Oakland	11	251	12,692	NA
Washtenaw	41	321	11,140	27
Wayne	21	1,192	10,139	23
Total	165	8,724	368,194	258

Source: 2012 Census of Agriculture

In 2012, farms in the region accounted for 14.3 percent of the total and 11.0 percent of colonies. The region produced 9.3 percent of all the honey in the state. While only having 19 farms the largest

production area is Livingston County. Washtenaw County has 41 farms with 321 colonies that produced 11,140 pounds. Sales in Washtenaw County were fairly small at \$27,000.

Vegetables

With the exception of Monroe County, this region is not a major producer of vegetables and most vegetables in the region are used for processing. Production in the region is shown in Table 11.

Table 11: Vegetables, Washtenaw and Surrounding Counties

County	Farms	Acres Harvested	Fresh Acres Harvested
Jackson	38	378	360
Lenawee	51	2,500	432
Livingston	53	731	NA
Monroe	86	8,459	3,574
Oakland	43	201	198
Washtenaw	109	1,819	NA
Wayne	69	572	552
Total	449	14,660	5,116

Source: 2012 Census of Agriculture

In 2012, farms in the region accounted 15.1 percent of the total, and acres accounted for 9.2 percent of the total. Almost two thirds of the acres harvested were used for processing. This is somewhat higher than the rate for the state as a whole. Washtenaw County has the most farms but Monroe County has the most acreage.

Acres devoted to individual vegetables in 2012 are shown in Table 12. The vegetables listed in table 12 are the most commonly grown in the region.

Table 12: Selected Vegetables, Washtenaw and Surrounding Counties Acres Harvested

County	Snap Beans	Bell Peppers	Other Peppers	Potatoes	Pumpkins	Squash	Sweet Corn	Tomatoes in the Open
Jackson	12	14	5	8	85	15	184	23
Lenawee	3	29	NA	5	247	4	63	NA
Livingston	9	10	3	8	85	17	63	23
Monroe	53	86	211	NA	259	76	874	1,595
Oakland	4	5	2	3	64	9	NA	16
Washtenaw	27	28	13	278	215	31	366	60
Wayne	34	18	22	8	136	24	203	42
Total	142	190	256	310	1,091	176	1,753	1,759

Source: 2012 Census of Agriculture

While the range of vegetables grown is relatively broad, tomatoes, pumpkins and sweet corn dominate. Washtenaw County is also a fairly large producer of potatoes. Pumpkin production is geared toward the fresh market. Most pumpkins in the area are probably used for decoration and tourism and not for food. Other vegetable production is relatively small. However, there is a base to build on especially to develop a local food system. In order to build on this, pumpkins, tomatoes and sweet corn and to a lesser extent potatoes have the most potential. Sweet corn and potatoes might be a good base to build on in Washtenaw County.

Fruits and Berries

Fruit production in the region is relatively limited. This is shown in Table 13 which shows the number of farms and the acres in orchards in 2012.

Table 13: Farms and Land in Orchards, Washtenaw and Surrounding Counties Acres Harvested

County	Farms	Acres				
Jackson	16	106				
Lenawee	39	675				
Livingston	15	64				
Monroe	40	151				
Oakland	16	228				
Washtenaw	48	274				
Wayne	11	61				
Total	185	1,559				

Source: 2012 Census of Agriculture

The number of farms in the region account for 7.4 percent of the total, and acres account for 14.0 percent of the state’s total. Traditionally, the area along Lake Michigan is the primary producer of fruit in the state.

Table 14 shows the acres in production of selected fruits in 2012.

Table 14: Acres in Selected Fruits, Washtenaw and Surrounding Counties Acres

County	Apples	Grapes	Peaches			
Jackson	70	6	8			
Lenawee	569	3	47			
Livingston	39	1	1			
Monroe	83	10	34			
Oakland	196	10	NA			
Washtenaw	216	9	9			
Wayne	53	2	NA			
Total	1,226	41	99			

Source: 2012 Census of Agriculture

The dominant fruit in the region is apples. Apple production is well suited for this region. Apples are also the largest fruit in terms of acreage in Michigan as well. Apples provide an opportunity for a local food system. Grape production is relatively small but could grow as interest in wine varieties continues to increase and new varieties are developed. It should be noted that the region is not well suited to produce cherries and other fruits.

Berries are a growing industry in the state. There has been a fairly dramatic increase in blueberry production and cranberry production also holds some promise. Table 15 shows berry production in the region. Strawberries have a long history of being produced in Michigan, and while hard numbers on the production of individual berries is difficult, strawberries are likely have the highest acreage devoted to production in the region.

Table 15: Farms and Land in Berries, Washtenaw and Surrounding Counties Acres

County	Farms	Acres					
Jackson	19	33					
Lenawee	19	40					
Livingston	20	70					
Monroe	19	37					
Oakland	11	25					
Washtenaw	38	110					
Wayne	8	4					
Total	134	319					

Source: 2012 Agriculture Census

In 2012, the region accounted for 9.3 percent of all berry farms and 1.4 percent of all acreage. Washtenaw County has the most farms and the most acreage. More than one third of the acreage in the region is in Washtenaw County. Due to current climatic conditions the area may not be well suited to blueberry production. Difficulty in obtaining permits may make it difficult to expand cranberry production.

Summary of Farm Production and Demand

With the exception of Lenawee County and to a lesser extent Monroe County farm production is not a major activity in the region. Production in Washtenaw County generally ranks behind Lenawee and Monroe counties but well ahead of Livingston, Oakland and Wayne counties. This makes the development of a fully integrated local food system difficult. The mix of products grown also makes it difficult to develop a local food system. The primary crops grown are the traditional field crops of corn, soybeans and wheat.

Vegetable and fruit production is also somewhat limited in the region. There is some production of tomatoes, potatoes, pumpkins, sweet corn and apples in region but there is less output in other fruits and vegetables. Livestock production is also limited. Even though there are few goats in the area there is some potential for growth. There is also interest in expanded hog production and processing although

the primary interest appears to be on a large scale commodity basis. A fair amount of milk for the fluid market is also produced in the region.

However, there are some bright spots. There is the potential to create a local food system for selected vegetables and apples. The demand for fluid milk can also be met from local production although the need to balance weekly and seasonal fluctuations in demand generally means that fluid milk handling is done on a commodity basis by large processors.

A rough estimate for the percent of local food demand in the region and Washtenaw County is presented in Table 16. In the case of Washtenaw County, county farm production is matched with county consumption. Demand is based on average U.S. per capita consumption of the relevant commodities multiplied by the population. Production is based on average yields in Michigan.

Table 16: Production as Percentage of Consumption Select Products

Commodity	Region	Washtenaw County
Fluid Milk	59.3%	82.8%
Apples	16.7	32.8
Tomatoes	26.5	10.1
Potatoes	2.4	24.3
Sweet Corn	18.3	42.6

These figures need to be interpreted very carefully. Processing vegetables are not differentiated from fresh vegetables, and Michigan tends to produce a great deal of processing tomatoes and potatoes. Consumption figures are based on total consumption, including fresh and processed. Yields and milk production are based on Michigan averages and the averages in the region may be higher or lower than the state average. Consumption is based on national average per capita consumption. Actual consumption is likely to be somewhat different, especially milk consumption in Washtenaw County. The numbers in table 16 should be considered a general estimate of the relative ability of local agriculture production to meet the local food demand.

IV. Food Processing and Distribution

Food Processing

The region has a fairly broad based food processing sector. Wayne County in particular is a major food processing county. Food processing in the region is outlined in Table 17. Wayne County also has the most diversified food processing sector.

Table 17: Food Manufacturing in Washtenaw and Surrounding Counties

County	Total Establishments	Paid Employees
Jackson	12	276
Lenawee	6	130
Livingston	9	128
Monroe	9	145
Oakland	82	1,494
Washtenaw	24	705
Wayne	142	3,321
Total	284	6,199

Source: County Business Patterns

Half the food processing establishments in the region are located in Wayne County. There are six dairy processing plants including three fluid milk facilities. Wayne County also has 11 animal slaughtering and processing facilities. However, few of these facilities are commercial sized. The dominant food processing activity is bakeries. Bakeries employ slightly less than 54 percent of total food processing workforce in the region. Oakland County is second with 82 establishments or 29 percent of the total that employ 24 percent of the workforce.

Washtenaw County has 24 food processing facilities which accounts for 8.5 percent of the total in the region. The Chelsea Milling Company (Jiffy Mix) is probably the biggest and best known food processor in Washtenaw County. In Washtenaw County, food processors employ 705 workers which account for 11.4 percent of the total in the region. The biggest food processing activity is bakery and tortilla manufacturing; there are 13 bakeries and tortilla firms employing 327 people. The importance of these firms indicates that developing a local wheat-bakery sector may be successful.

Distribution and Packaging

Food wholesaling generally occurs in or near population centers with good access to major highways although there are also some wholesalers located in rural areas. Table 18 shows the number of wholesale establishments and employment where available.

Table 18: Food Wholesalers in Washtenaw and Surrounding Counties

Counties	Total Establishments	Number of Employees
Jackson	2	NA
Lenawee	3	NA
Livingston	19	330
Monroe	6	NA
Oakland	96	2,088
Washtenaw	12	115
Wayne	205	6,283
Total	343	NA

Source: County Business Patterns

As is the case with food processing Wayne County is the dominant county accounting for almost 60 percent of the total establishments. The major employers are fresh fruits and vegetable wholesalers, meat and meat product wholesalers, packaged frozen food wholesalers, and dairy product wholesalers.

Washtenaw County ranks behind Wayne, Oakland and Livingston counties with 12 wholesale establishments employing 115 workers. General grocery wholesalers appear to be primary wholesale activity.

Packaging

Determining food packaging firms is difficult. There are relatively few paper based packaging firms in the region and the Census Bureau does not separate food packaging firms from firms that provide packaging for other industries. Table 19 shows the number of packaging firms in the region.

Table 19: Packaging Firms in Washtenaw and Surrounding Counties

County	Total Establishments	Number of Employees
Jackson	2	NA
Lenawee	1	NA
Livingston	2	NA
Monroe	4	NA
Oakland	4	100
Washtenaw	3	NA
Wayne	16	822
Total	32	NA

Source: County Business Patterns

Half the packaging firms are in Wayne County. The other 50 percent of the firms are relatively evenly dispersed. Due to the small number of firms getting a good estimate of employment is not possible. Also, these firms are likely to be involved in other activities besides food packaging.

The data in this section indicates that in the region and Washtenaw County food processing and distribution is a function of population. Wayne County is the dominant county followed by Oakland

County. Wayne County in particular has a wide range of food processing firms. Washtenaw County's food processing activities are more limited, but it does appear to have the potential to expand its bakery and wheat processing capacity.

V. Opportunities and Barriers to Local Food Processing

Opportunities

There are limited opportunities for local food processing. The population in the region is relatively stagnant which limits the potential for growth. However, there are areas of potential growth, especially in specialty and baked food products. There also still appears to be some potential for continued growth in the craft beer industry.

There are still relatively few breweries in the region. Washtenaw County has two breweries which may not include brewpubs. Another brewery is planned to start producing beer in Saline. The demographics of Washtenaw County are well suited to increased craft beer production. There is also increased interest in producing locally grown hops and barley in the state to meet the needs of craft brewers. In addition there are several entrepreneurs in Michigan interested in starting malt houses to process the grains needed for beer production.

As previously mentioned, there is also a potential to develop a bread and bakery sector. The land in the area is well suited to wheat production and a major processing activity in the area, including Washtenaw County, is bakery products. Also, wheat producers in the state are interested in growing varieties of wheat that processors want.

There is also potential for fresh market fruits and vegetables. A good portion of apples, pumpkins, tomatoes and sweet corn are grown in the area and there is a base to build on. One way to build on this is through the use of Community Supported Agriculture (CSAs). CSAs are a group of consumers that agree to buy a given amount of a farmer's produce. Generally the consumer takes delivery of commodities throughout the summer and fall as different fruits and vegetables come into season. CSAs are best suited for vegetable farms and to a lesser extent fruits crops. The CSA business model has seen rapid growth in the past five years, especially in Washtenaw County.

Finding good information on CSAs is difficult due to their growth. The University of Michigan Sustainable Foods Program lists 31 CSAs in the area. Most appear to be located in Washtenaw County. While most of the CSAs listed by the Sustainable Foods Program are focused on fruits and vegetables there are at least three that offer meat products. The organization also lists 10 You-Pick Farms in Washtenaw County. These farms are geared toward tourism as well as providing local food.

The MFIN could be expanded to increase local sales to institutions. While some institutions may be interested in obtaining food from local sources they may lack the time, or expertise to do this. The MFIN could act as an intermediary linking producers and processors to institutions.

Next Generation Cooperatives (NGCs) are another way to promote locally produced food. NGCs are made up of a group of producers who work together to produce and market value added products. It is the value added nature of their activities that separate NGCs from traditional cooperatives. An NGC can be formed to focus on local buyers.

Enough milk is produced in the area to meet much of the fluid demand. The dairy plants in the region probably ensure that the milk is produced locally. However, that fact that it is locally produced is not advertised as it could be. It is difficult to match supply and demand on a daily or seasonal basis which makes small and medium sized fluid milk handling and processing difficult. Individual dairy farmers or a group of dairy farms could develop artisan cheeses and other dairy products. The demand for artisan dairy products in Washtenaw County is likely to be quite strong.

Barriers

A major barrier is the mix of crops grown in the region. The dominant crops grown in the region are corn and soybeans which are primarily fed to livestock. The farmland in the area is well suited to corn and soybean production. Farmers who are used to growing these crops are unlikely to be interested in other crops with the possible exception of wheat and perhaps barley.

As previously noted there are several large institutions in the region, primarily prisons and universities. Given the current food service arrangements finding entry to this market may be extremely difficult. The same could be true of colleges and universities. One thing all the members of the agri-food supply chain have in common is that they are busy. Many food service buyers have suppliers coming to them; an individual farmer usually does not have the time to do this. Also quantities produced by an individual farmer may not be large enough to meet the demand of a large institution.

One way to address this issue is by creating an aggregator or broker position. The role of the aggregator or is to obtain sufficient amounts of a product to justify purchases by institutions and other large buyers. The person who would play this role and who would pay for the position needs to be addressed. An NGC or perhaps the MFIN could also provide this role.

Food processing, especially for products sold a commodity basis, exhibits strong economies of scale. There appears to be sufficient processing capacity in place, and competing with existing facilities especially on the basis of price will be difficult. This includes the fluid milk processing plants in the region. While there may be some selective opportunities, for the most part expanding processing will be difficult.

Quality and price are also important considerations. A survey of restaurants in Lansing Michigan indicated an interest in locally produced meat provided the quality standards were met. There was some interest in paying a slightly higher price for locally sourced meat but there was a limit, it appeared that some white table restaurants were willing to pay 5 to 10 percent more for locally sourced meat but were not interested in paying 33 percent or more for meat. Michigan brewers have also been consistent with hop producers. Quality standards and price points must be met in order to for brewers to buy

locally produced hops. These examples indicate that price and quality are important to buyers and “local” in and of itself may not be a successful marketing approach.

Meat Production and Processing

Washtenaw County staff requested that meat processing receive particular attention. Enhanced local meat production and processing is a goal of many supporters of local food systems. However, establishing such supply chains is very difficult, and the potential in Washtenaw and surrounding counties is poor.

Wolverine Packing in Wayne County is the largest processor in the region. It provides ground beef, steak cuts, and slaughters and processes lamb and veal. There are other smaller processors in the region but they face several barriers to growth.

One barrier is the fact that there are a relatively few cattle and hogs in the area. There are insufficient number animals in the region to support a commercial sized processing operation. There are no commercial hog processing plants in Michigan although there is interest in expanding hog slaughter and processing in either Ohio or Michigan.

Research conducted by the Center for Regional Food Systems at Michigan State University conducted a survey of small meat processors that indicate that increasing meat processing capacity will be difficult. Many processors are not certified by the USDA meaning they cannot sell to a third party. Furthermore, many who are not certified by the USDA are not interested in getting certified because of the perceived cost of the certification process. These processors tend to specialize in processing animals sold at fairs or deer killed during the hunting season.

Another issue is finding a market for the entire carcass. Large scale beef and pork processors sell the entire carcass including blood, bones, organs and hides. This creates a revenue stream in a narrow margin industry. Disposing of these byproducts for a small slaughterer is an added cost. Beef processors can generally find a market for steaks and hamburger meat but may have difficulty finding a market for roasts and other cuts. This is another problem facing small scale processors.

VI. Summary

This report outlines the potential for an expanded local food system in Washtenaw and the surrounding counties. It analyzed both supply and demand for food in the area. About 40 percent of Michigan’s population lives in the region, and more than 350,000 live in Washtenaw County. There are also several large institutions, especially the University of Michigan and the University Hospitals. Overall the market is big enough to support an integrated food system.

Production is an issue. Perhaps due to the population density especially in Wayne and Oakland counties there is not a great deal of farm production. The major crops grown in the area, especially in Lenawee, Monroe, Jackson and Washtenaw counties are primarily corn and soybeans which are not directly used

for human consumption. This limits the ability to develop a local food system. Outside of Wayne County there is not a great deal of food processing and even less diversity in food processing.

Meat production and processing is a particular point of emphasis for many supporters of local food systems. However, establishing a local meat sector is extremely difficult. There is some interest in establishing a pork processor in Southeast Michigan or Northwest Ohio, but on a large scale commodity basis. Currently there are very few processing meat processing plants in the area. Economies of scale and the ability to sell the entire carcass is an important advantage large commercial processors have over smaller processors. This part of the state is not a major producer of livestock species. It would require the establishment of a truly innovative set of practices for a local meat system to be effective.

Nonetheless there are limited opportunities for expanded local food production or at least an increased awareness of locally produced food. The craft beer industry appears to have some potential. CSAs could also be used to link consumers and farmers, especially for fruits and vegetables. Perhaps the MFIN could do the same for linking farmers with institutions. The fact that fluid milk is produced and processed locally could be promoted. There is also sufficient production of selected fruits and vegetables that could meet much of the local demand.

Another big opportunity is in the wheat/bread/bakery sector. The land in this region is well suited to wheat production and bakeries are the most common food processing activity in the region. Michigan's wheat producers are also interested in growing new varieties that processors and artisan bakers desire. In order for a local food system to be successful quality needs to be maintained and local producers and processors need to be price sensitive.

There are likely some missing actors in supply chain that would improve the likelihood of success of a local food system. An aggregator of some type may be necessary to get enough output to meet the needs of buyers. This is particularly important for sales to institutions. Employees in firms along the supply chain are busy and may not have the time or the connections to search out locally produced food. An aggregator or broker could make it easier for those firms and institutions interested in locally produced food. A NGC could fulfill the same role.